REMOVAL OF WATER MAINS AND OBSTRUCTIONS

0204.0100 GENERAL

O204.0101 Description of Work. The work under this Section shall consist of the removal—wholly or in part—and satisfactory disposal of all water mains, structures, and obstructions, within rights-of-way or easements, that are necessary in order to complete the items of work in the Contract Documents and are not specifically covered under other items in the Contract Documents.

Existing water mains, pavement, sidewalks, curbs, gutters and other existing improvements that are to become an integral part of the planned improvements shall remain even though not specifically noted.

Non-hazardous materials removed and designated not to be salvaged or incorporated into the work shall become the property of the Contractor, unless otherwise noted.

0204.0300 EXECUTION

0204.0301 General. Except in areas to be excavated, holes, cavities, trenches, and depressions within the construction area resulting from the removal of water mains or obstructions shall be backfilled with suitable material compacted to a density of not less than 95 percent of the maximum density as determined in accordance with the requirements of Arizona Test Methods 225, 226, 227, 230 or 231, and 232 or as required by permitting authority, or as directed by the Engineer.

0204.0302 Removal of Water Mains.

- **(A) General.** All removed water mains shall become property of the Contractor, unless otherwise noted.
- **(B)** Handling and Disposal Procedures for Cement Asbestos Pipe. In addition to the requirements specified herein, the Contractor shall comply with all requirements of the Pima County Department of Environmental Quality (PDEQ) pertaining to the handling and disposal of asbestos materials.

The Contractor shall be responsible for the proper removal, handling, storage, and disposal of all cement asbestos pipe materials encountered during the course of the work. The Contractor shall comply with all ordinances, laws, procedures, and policies regarding the handling and disposal of cement asbestos pipe as adopted by the jurisdiction in which the work is being conducted, as well as the jurisdiction through whose limits the material must be hauled and/or disposed of. The Contractor shall be responsible for all civil and/or criminal penalties that may be levied for the improper handling or disposal of the cement asbestos material.

Disposal of cement asbestos pipe material shall occur only at approved asbestos disposal sites.

The Contractor shall direct all questions regarding asbestos disposal to the agency with jurisdiction over the approved disposal site.

The Contractor shall notify the Engineer and the approved disposal site a minimum of 24 hours prior to the Contractor's intent to dispose of cement asbestos pipe material. The Contractor shall have obtained and completed all applicable forms and permits prior to disposing of cement asbestos pipe materials.

The Contractor shall provide the Engineer with a copy of all executed forms and permits, which shall serve as verification of proper disposal at an approved asbestos disposal site.

0204.0303 Removal of Pavement.

(A) Portland Cement Concrete Pavement. Unless otherwise specified in the special specifications, concrete pavement designated on the project plans to be removed shall be disposed of by the Contractor at a site secured by him/her. Reinforcement in the broken concrete pavement shall be cut within 3 inches of the concrete pieces.

The existing pavement to remain shall be saw cut to a true line with straight vertical edges free from irregularities.

(B) Bituminous Pavement. Unless otherwise specified in the special specifications, all bituminous pavement designated on the plans to be removed shall be disposed of by the Contractor in accordance with the regulations promulgated by PDEQ.

The existing pavement to remain shall be saw cut to a true line with straight vertical edges free from irregularities.

0204.0304 Removal of Miscellaneous Concrete. Miscellaneous concrete shall be defined as all or portions of:

- Mortared rubble masonry
- Curbs
- Sidewalks
- Driveways
- Aprons
- Slope paving
- Island paving
- Retaining walls
- Spillways
- Drainage structures

- Concrete box culverts
- Foundations
- Footings
- Manholes
- All other Portland cement concrete or masonry construction except bridges and pavement

All existing miscellaneous concrete shall be removed from the trench area and to a depth of at least 6 inches below the planned invert of the pipe unless otherwise specified in the special specifications or on the project plans, or as approved by the Engineer.

When portions of the existing concrete are to remain, the concrete shall be saw cut to a true line with straight vertical edges free from irregularities.

Concrete removal operations shall be performed without damaging any portion to remain in place. All damage to existing concrete that is to remain in place shall be repaired to a condition equal to or better than that existing prior to beginning removal operations. The damaged or broken concrete will be removed to the nearest expansion joint. Repair of existing concrete damaged by the Contractor's operations shall be at his/her expense.

Existing reinforcement to be incorporated in new work shall be protected from damage and shall be thoroughly cleaned of all adhering material before being embedded in new concrete.

O204.0305 Removal of Signs, Delineators, Fire Hydrant Markers, Traffic Signals, and Mailboxes. Existing warning, regulatory, guide, and route marker signs, delineators, and raised pavement location markers for fire hydrants, traffic signals, and mailboxes that are to be removed shall be reset or replaced by the Contractor in their original location.

The Contractor shall dismantle the sign panels, delineators, and mailboxes, and remove the posts from the ground in such a manner as to prevent damage to the posts. Signs, delineators, and sign posts shall be removed, stored, and reset in accordance with the jurisdictional authority's requirements. Warning and regulatory signs and traffic signals shall be replaced with temporary installations that are in place and functioning prior to removal of the existing signs or traffic signals. Mailboxes shall be reset as temporary installations such that no interruption in delivery service occurs.

Removal or relocation of traffic signals shall be in accordance with the jurisdictional authority.

0204.0306 Removal of Curb. Existing curb designated on the project plans to be removed shall be removed in such a manner as to preserve the existing bituminous or Portland cement concrete surfacing.

The Contractor shall remove existing concrete curb to the nearest expansion joint that will provide for a smooth transition from new to existing curb. If the nearest joint is a scored joint, the Contractor shall saw cut the curb for its full depth and width.

0204.0307 Removal of Fence. All fence to be removed shall become the property of the Contractor, unless designated for salvage on the project plans.

When designated for salvage, fence and gates shall be carefully dismantled and neatly rolled or coiled. Posts shall be cleaned of all concrete and dirt.

In areas where new fence or relocated fence is to be installed, the Contractor shall perform the removals in such a manner as to ensure at all times the security of the area being fenced. All work shall be in accordance with TW Section 0214 and Standard Details 1610 and 1615.

O204.0308 Salvaged Items. All listed components shall be excavated and removed with caution, and shall remain undamaged during removal and transport. All components shall be delivered to a Tucson Water facility.

- (1) 24-inch valves and larger
- (2) All fire hydrants
- (3) 4-inch stainless steel PRV and larger